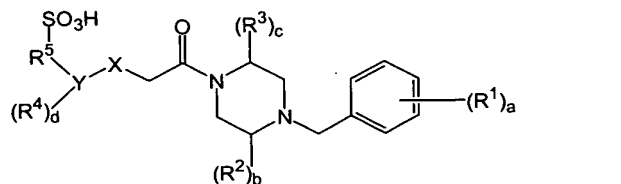


ABSTRACT

The present invention relates to methods of using CCR1 antagonists as immunomodulatory agents. In particular, the methods relate to using compounds of the formula



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or the pharmaceutically acceptable salt thereof; wherein X, Y, a, b, c, d,  $R^1$ ,  $R^2$ ,  $R^3$  and  $R^5$  are as defined herein.